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The distribution of *Cydia pyrivora* (Lepidoptera: Tortricidae)

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Abstract. Information on the geographical distribution and biology of *Cydia pyrivora* (Danilevsky, 1947) (Lepidoptera: Tortricidae) are presented. The species are new to more countries.

Samenvatting. De geografische verspreiding van *Cydia pyrivora* (Lepidoptera: Tortricidae) Informatie over de geografische verspreiding en de biologie *Cydia pyrivora* (Danilevsky, 1947) wordt gegeven.

Résumé. La distribution géographique de *Cydia pyrivora* (Lepidoptera: Tortricidae) Des informations sur la distribution et la biologie de *Cydia pyrivora* (Danilevsky, 1947) sont données.

Key words: *Cydia pyrivora* – Faunistics – Distribution.

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Cydia pyrivora (Danilevsky, 1947) is a well-known pest of *Pyrus* sp. (Pear) and widespread mainly in eastern and southern Europe.

C. pyrivora is a rather big *Cydia* with a wing span from 16 to 22 mm. The eastern European specimens have a more blackish grey ground colour than the Mediterranean ones, which have light grey strigula on the dorsum and thus show more contrast in the pattern. The fine grey dorsal strigulae are rather vertical, slightly curved and reaching two thirds of the wing which normally enables the species to be easily recognizable. Figs. 1 and 2 represent the two colour forms of *pyrivora*. The genitalia are figured in Razowski (2003, pls. 39 & 84).

The larva is white with a brown head and it feeds on *Pyrus*, both cultivated and wild species. The egg is laid on the fruit and the first larval instars feed on the seeds, later on the median part of the fruit. The larvae overwinter in a cocoon

on the trunks or between debris on the ground. Pupation takes place in spring. The species has one brood flying from the end of June to the end of August (Meijerman & Ulenberg 2000, Razowski 2003). The 59 specimens in the author's collection are from 02.vii to 20.viii with peaks from the first week of July to the first week of August. It comes readily to light and to pheromones but is more rarely seen during day time. *C. pyrivora* was described by Danilewsky in 1947 from the European part of Russia. In 1950 Obratsov described *C. dannehli* from Sicily (Brown 2005), but this is merely a synonym .

Geographical distribution

The distribution of *C. pyrivora* is, despite the fact that the species is a well-known pest, not precisely known. The published information differs in nearly all publications, including the ones available on the internet.

In the European Catalogue (Razowski 1996) the species is mentioned from Albania, Austria, Bulgaria, Crete, Czech Republic, Italy, Hungary, Latvia, Romania, Sardinia, Sicily, Slovakia, and Yugoslavia. In Fauna Europaea version 1.3 (Aarvik 2007) the finding from Latvia is called doubtful and the species is furthermore mentioned from Macedonia (part of ex-Yugoslavia), Slovenia, and Ukraine.

Corrections and comments to these two European distributional surveys:

1. **Latvia:** Riga, 1 specimen 31.vii.1969 (J. Muskars) caught at light. The species is thought to be introduced (Šulcs 1973). The pupation does not take place at the fruit, and the species is not found as introduced in other countries in spite of the huge amount of pears being transported around in Europe every year. The specimen might as well be regarded as an occasional migrant to Latvia.

2. The findings from former Yugoslavia represent more different countries: **Macedonia** as mentioned in Fauna Europaea; **Montenegro:** Đurđevića Tara, Most, 1♂ 24.vii.1982; Đurđevića Tara, Vrelo, 1♂ 24.vii.1982 (Mihajlović, Zečević & Jakšić 1990); **Kosovo:** Pristina, 1♂ 20.viii.1989 (K. Larsen leg. et coll.). This area is still a disputed political entity.

3. **Russia:** The species is not mentioned from Russia in these catalogues despite the type locality which is in the European part of Russia: Belgorod, Borisovka just north of the border to Ukraine. This locality is placed in district 9: European Central-Chernozem region in the new Russian catalogue (Sinev 2008). It is also found in district 11: Volga-on-Don region; 12: Lower-Volga region; 13: West-Caucasian region; 14: East-Caucasian region (Sinev 2008). The species is not mentioned from other regions and thus the mentioning from Siberia (Razowski 2003) needs confirmation.

4. **Greece:** In the European distributional surveys only known from Crete, but the species is widely distributed on the mainland as well. Greece: Konitsa: 10 km NE Geroplatanos, 800 m, 5 specimens 24.vii.1990 (M. Fibiger leg., coll.

K. Larsen); Delfi: Arachova, 1200 m, 1♂ 20–21.vii.1997 (M. Fibiger leg., coll. K. Larsen).

5. **France:** Vaucluse (Buvat leg.) & Alpes-de-Haute-Provence (Robineau leg.) (Leraut 1997); Var: La Garde-Freinet, 2 specimens 19.vii.1999 (K. Larsen leg. et coll.).

6. **Moldova:** (Ovsyannikova & Grichanov 2009). No precise record is given.



Figs. 1–2. *Cydia pyrivora* (Danilevsky, 1947). 1.– Slovakia, Zemplinske Vrchy, Ladomovce, Kasvar, 400 m. 02.vii.1993 (leg. et coll. K. Larsen); 2.– Turkey, Konya, Taşkent, 1500 m. 20–21.vii.1994, leg. et coll. K. Larsen (Photo K. Larsen).

Outside Europe the species is also mentioned from more counties.

Turkey: (Razowski 2003). As very little about the distribution in Turkey is known, the following findings are here reported: Amasya: Akören, 1000 m, 1 specimen 23.vii.1998 (K. Larsen leg. et coll.); Yozgat, 1500 m, 1 specimen 22.vii.2000 (K. Larsen leg. et coll.); Kayseri: 10 km SSE Yahiali, 1600 m, 2 specimens 31.vii.1989 (Fibiger & Esser leg., coll. K. Larsen); Nevşehir: 7 km SE Avanos, 1200 m, 1 specimen 02.viii.1989 (Fibiger & Esser leg., coll. K. Larsen); Konya: Taşkent, 1500 m, 4 specimens 20–21.vii.1994 (K. Larsen leg. et coll.); Erzinçan: Çağlayan, 1500 m, 1 specimen 27.vii.1989 (J. A. W. Lucas, coll. K. Larsen); Denizli: 5 km W Babadağ, 900 m, 1 specimen 16.vii.1987 (M. Fibiger leg., coll. K. Larsen); Gümüşhane: Road to Siran, 14 km, 1300 m, 1 specimen 24.vii.1993 (K. Larsen leg. et coll.); Adana: 5 km N Saimbeyli, 1200 m, 1 specimen 28–29.vii.1998 (K. Larsen leg. et coll.); 5 km S Çanakkale, 1 specimen 18.vii.1987 (M. Fibiger leg., coll. K. Larsen).

Syria: (Razowski 2003). No precise records are given. The mention could be from a former Syrian area which is now situated in Turkey.

Uzbekistan: (AgroAtlas-Pests). Razowski (2003) reports the species from the Thian Shan Mountains, the westernmost part of those are in Uzbekistan.

Algeria: (Meijerman & Ulenberg 2000). No precise record is given.

The distribution can be characterized as central-eastern European – Mediterranean connected with the warmer parts of the natural distribution of the food plant *Pyrus communis* (GBIF Portal). There are very few findings of *C. pyrivora* outside the main distribution area – Latvia, Uzbekistan. Records from further away can be understood as occasional migration or small separate populations outside the main area.

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